

```

EEEEEEEEEEEEEEEEEE   RRRRRRRRRRRR   FFFFFFFFFFFFFF
EEEEEEEEEEEEEEEEEE   RRRRRRRRRRRR   FFFFFFFFFFFFFF
EEEEEEEEEEEEEEEEEE   RRRRRRRRRRRR   FFFFFFFFFFFFFF
EEE                   RRR               FFF
EEE                   RRR               FFF
EEE                   RRR               FFF
EEE                   RRR               FFF
EEE                   RRR               FFF
EEE                   RRR               FFF
EEEEEEEEEEEEEEEE     RRRRRRRRRRRR   FFFFFFFFFFFFFF
EEEEEEEEEEEEEEEE     RRRRRRRRRRRR   FFFFFFFFFFFFFF
EEEEEEEEEEEEEEEE     RRRRRRRRRRRR   FFFFFFFFFFFFFF
EEE                   RRR       RRR     FFF
EEE                   RRR       RRR     FFF
EEE                   RRR       RRR     FFF
EEE                   RRR           RRR   FFF
EEE                   RRR           RRR   FFF
EEE                   RRR           RRR   FFF
EEEEEEEEEEEEEEEE     RRR               RRR   FFF
EEEEEEEEEEEEEEEE     RRR               RRR   FFF
EEEEEEEEEEEEEEEE     RRR               RRR   FFF

```

[illegible]

SSSSSSSS	BBBBBBBB	11	11	
SSSSSSSS	BBBBBBBB	11	11	
SS	BB	1111	1111	
SS	BB	1111	1111	
SS	BB	11	11	
SS	BB	11	11	
SSSSSS	BBBBBBBB	11	11	
SSSSSS	BBBBBBBB	11	11	
	BB	11	11	
SS	BB	11	11	
SS	BB	11	11	
SS	BB	11	11	
SS	BB	11	11	
SSSSSSSS	BBBBBBBB	111111	111111
SSSSSSSS	BBBBBBBB	111111	111111

LL	IIIIII	SSSSSSSS
LL	IIIIII	SSSSSSSS
LL	II	SS
LL	II	SS
LL	II	SS
LL	II	SS
LL	II	SSSSSS
LL	II	SSSSSS
LL	II	SS
LL	II	SS
LL	II	SS
LL	II	SS
LLLLLLLLLL	IIIIII	SSSSSSSS
LLLLLLLLLL	IIIIII	SSSSSSSS

N 15
16-Sep-1984 00:15:02
5-Sep-1984 14:22:02

VAX-11 FORTRAN V3.4-56
DISK\$VMSMASTER:[ERF.SRC]SB11.FOR;1

Page 1

```
0001      Subroutine SB11 (lun)
0002      C
0003      C Version:      'V04-000'
0004      C
0005      C*****
0006      C*
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0024      C*
0025      C*
0026      C*****
0027      C
0028      C
0029      C
0030      C      Author: Sharon Reynolds      Creation date: 20-Jan-1981
0031      C
0032      C
0033      C      Functional description:
0034      C
0035      C      This module produces the error log report for the SB11
0036      C      DECdataway I/O subsystem.
0037      C
0038      C      Modified by:
0039      C
0040      C      V03-003 SAR0234      Sharon A. Reynolds,      28-Mar-1984
0041      C      Changed the call to UCBSL_OWNUIC to ORBSL_OWNER.
0042      C
0043      C      V03-002 SAR0110      Sharon A. Reynolds,      23-Jun-1983
0044      C      Changed the carriage control in the 'format' statements
0045      C      for use with ERF.
0046      C
0047      C      V03-001 SAR0035      Sharon A. Reynolds,      8-Jun-1983
0048      C      Removed brief/cryptic support.
0049      C
0050      C      v02-004 BP0004      Brian Porter,      23-NOV-1981
0051      C      Minor edit.
0052      C
0053      C      v02-003 BP0003      Brian Porter,      05-NOV-1981
0054      C      Added 'device attention' support.
0055      C
0056      C      v02-002 BP0002      Brian Porter,      23-JUL-1981
0057      C      Added new uba routines.
```

B
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0058 C
0059 C      v02-001 BP0001      Brian Porter,      15-JUL-1981
0060 C      Misc. changes made by S. Reynolds in response to input
0061 C      from W. Saltz. Added call to DHEAD1.
0062 C**
0063
0064 Include 'SRC$:MSGHDR.FOR /NOLIST'
0123 Include 'SRC$:DEVERR.FOR /NOLIST'
0224
0225 Byte      lun
0226 Byte      hdr_map_valid
0227 Byte      dat_map_valid
0228 Byte      att_ucb0
0229 Byte      port_id
0230
0231 Integer*2  csr0
0232 Integer*2  csr1
0233 Integer*2  csr2
0234
0235 Integer*4  COMPRESS4
0236 Integer*4  COMPRESSC
0237 Integer*4  no_irp
0238 Integer*4  field
0239 Integer*4  unit
0240 Integer*4  devdepend
0241 Integer*4  devsts
0242 Integer*4  tt_retry_cnt
0243 Integer*4  tt_protocol_err
0244 Integer*4  tumble_table
0245 Integer*4  registers
0246 Integer*4  err_sts
0247 Integer*4  uba_reg1(0:2)
0248 Integer*4  uba_reg2(0:2)
0249 Integer*4  dataway_addr
0250
0251 Parameter  timeout = 96
0252 Parameter  rt80 = 1
0253 Parameter  dyt01 = 2
0254 Parameter  dpm01 = 4
0255 Parameter  dis = 8
0256
0257 Character*83 tt_protocol_id(0:7)
0258 Character*15 tumble_tbl(5:7)
0259 Character*35 err_num(0:31)
0260 Character*29 func(0:7)
0261 Character*22 csr0_1(5:7)
0262 Character*32 csr2_1(6:7)
0263 Character*6  device(1:8)
0264 Character*46 dvsts(0:11)
0265
0266 C
0267 C      Make the register save area of the error log buffer available
0268 C      to this module
0269 C
0270
0271 Equivalence (err_sts,EMBSL_DV_REGSAV(0))
0272 Equivalence (registers,EMBSL_DV_REGSAV(1))

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0273      Equivalence      (devdepend,EMB$$_DV_REGS$V(2))
0274      Equivalence      (devsts,EMB$$_DV_REGS$V(3))
0275      Equivalence      (uba_reg1,EMB$$_DV_REGS$V(4))
0276      Equivalence      (uba_reg2,EMB$$_DV_REGS$V(7))
0277
0278      C
0279      C
0280      C
0281
0282      Data      tt_protocol_id(0)      /*PREMATURE END OF MESSAGE*/
0283      Data      tt_protocol_id(1)      /*BAD ADDRESS*/
0284      Data      tt_protocol_id(2)      /*ILLEGAL RESPONSE CONTROL CODE*/
0285      Data      tt_protocol_id(3)      /*SEQUENCE BIT WRONG-NO REPEAT!COMMAND SENT*/
0286      Data      tt_protocol_id(4)      /*ILLEGAL MSG-LENGTH ON:NON ''SI'' RESPONSE*/
0287      Data      tt_protocol_id(5)      /*ILLEGAL RESPONSE OF ''SI''!WHEN NOT
0288      1 REQUESTED*/
0289      Data      tt_protocol_id(6)      /*ILLEGAL RESPONSE OF ''RNR'' TO:''RI''
0290      1 COMMAND WHEN READY TO RECEIVE NOT REQUESTED*/
0291      Data      tt_protocol_id(7)      /*ILLEGAL RESPONSE OF ''RNR'' TO:''RPS''
0292      1 COMMAND WHEN READY TO RECEIVE NOT REQUIRED*/
0293
0294      Data      tumble_tbl(5)      /*PROTOCOL ERROR*/
0295      Data      tumble_tbl(6)      /*TIMEOUT ERROR*/
0296      Data      tumble_tbl(7)      /*CRC ERROR*/
0297
0298      C
0299      C
0300      C
0301      C
0302      C
0303      Data      err_num(0)      /*LATENCY ERROR-NO DATA!TRANSFERRED*/
0304      Data      err_num(1)      /*LATENCY ERROR-DATA TRANSFERRED*/
0305      Data      err_num(2)      /*MEMORY TIMEOUT ERROR*/
0306      Data      err_num(3)      /*ONLINE TRANSITION*/
0307      Data      err_num(4)      /*OFFLINE TRANSITION*/
0308      Data      err_num(5)      /*DATA OVERRUN ERROR*/
0309      Data      err_num(6)      /*WRITE FUNCTION TIMEOUT*/
0310      Data      err_num(7)      /*UNSOLICITED DATA*/
0311      Data      err_num(8)      /*LINE ERROR*/
0312      Data      err_num(9)      /*RESERVED*/
0313      Data      err_num(10)      /*NO DATA TRANSFERRED*/
0314      Data      err_num(11)      /*INVALID TYPE 2 TUMBLE!TABLE ENTRY*/
0315      Data      err_num(12)      /*I/O DONE WITH NO TRANSFER*/
0316      Data      err_num(13)      /*ONLINE I/O DONE*/
0317      Data      err_num(14)      /*INVALID DEVICE UNIT NUMBER*/
0318      Data      err_num(15)      /*NON-EXISTENT MEMORY*/
0319      Data      err_num(16)      /*PORT WAIT QUEUE TIMEOUT*/
0320      Data      err_num(17)      /*USER INITIATED SHUTDOWN*/
0321      Data      err_num(18)      /*CONTROLLER STARTUP*/
0322      Data      err_num(19)      /*INVALID TYPE 1 TUMBLE!TABLE ENTRY*/
0323      Data      err_num(20)      /*DRIVER DATA STRUCTURE ERROR*/
0324      Data      err_num(21)      /*RESERVED*/
0325      Data      err_num(22)      /*RESERVED*/
0326      Data      err_num(23)      /*RESERVED*/
0327      Data      err_num(24)      /*AST NOT DELIVERABLE*/
0328      Data      err_num(25)      /*ENABLE LOGGING OF DEC$DATAWAY!ERROR*/
0329      Data      err_num(26)      /*DISABLE LOGGING OF DEC$DATAWAY!ERROR*/

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0330      Data      err_num(27)      /*RESERVED*/
0331      Data      err_num(28)      /*RESERVED*/
0332      Data      err_num(29)      /*DRIVER INITIATED SHUTDOWN*/
0333      Data      err_num(30)      /*RESERVED*/
0334      Data      err_num(31)      /*RESERVED*/
0335
0336
0337      C
0338      C      Define text for bits in CSRO
0339      C
0340
0341      Data      func(0)            /*NO-OP*/
0342      Data      func(1)            /*INITIATE TRANSFER OUT*/
0343      Data      func(2)            /*INITIATE TRANSFER IN*/
0344      Data      func(3)            /*SEND TRANSPARENT DATA*/
0345      Data      func(4)            /*SEND TRANSPARENT DATA-NO CRC*/
0346      Data      func(5)            /*RESERVED*/
0347      Data      func(6)            /*RESERVED*/
0348      Data      func(7)            /*CANCEL OPERATION*/
0349
0350      Data      csr0_1(5)           /*HARDWARE ERROR*/
0351      Data      csr0_1(6)           /*DONE INTERRUPT ENABLE*/
0352      Data      csr0_1(7)           /*DONE*/
0353
0354
0355      C
0356      C      Define text for bits in CSR2
0357      C
0358
0359      Data      csr2_1(6)           /*PORT AVAILABLE INTERRUPT ENABLE*/
0360      Data      csr2_1(7)           /*PORT LOCK*/
0361
0362
0363      C
0364      C      Define the devices currently allowed on the DECdataway
0365      C
0366
0367      Data      device(1)           /*RT80*/
0368      Data      device(2)           /*DYT01*/
0369      Data      device(4)           /*DPM01*/
0370      Data      device(8)           /*DIS*/
0371
0372      C
0373      C      Define the text for the bit assignments in ucb$w_devsts
0374      C
0375
0376      Data      dvsts(0)            /*REQUEST IN THE PORT-WAIT-QUEUE*/
0377      Data      dvsts(1)            /*CANCEL IN PROGRESS*/
0378      Data      dvsts(2)            /*TRANSFER OPERATION IS REQUESTED*/
0379      Data      dvsts(3)            /*UNIT IS ACTIVE*/
0380      Data      dvsts(4)            /*SYSTEM ERROR LOGGING ENABLED*/
0381      Data      dvsts(5)            /*LOGGING OF ON/OFF LINE ENABLED*/
0382      Data      dvsts(6)            /*USER ERROR LOG IS ENABLED*/
0383      Data      dvsts(7)            /*INHIBIT ERROR LOGGING*/
0384      Data      dvsts(8)            /*UNIT IS SHUTDOWN*/
0385      Data      dvsts(9)            /*REQUEST HAS TIMED OUT*/
0386      Data      dvsts(10)           /*RESERVED*/

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0387      Data      dvsts(11)      /'REQUEST ONLINE*'/
0388
0389
0390      C
0391      C      Construct the error log report header
0392      C
0393
0394      Call FRCTOF (lun)
0395
0396      call dhead1 (lun,'UBA DEC DATAWAY')
0397
0398      C
0399      C      Extract necessary information for later use
0400      C
0401
0402      Hdr_map_valid = LIB$EXTZV (30,1,EMB$$_DV_NUMREG)
0403
0404      Dat_map_valid = LIB$EXTZV (31,1,EMB$$_DV_NUMREG)
0405
0406      No_irp = LIB$EXTZV (0,16,EMB$$_DV_NUMREG)
0407
0408      C
0409      C      Decode and output the bits in the csr0 register
0410      C
0411
0412      Csr0 = LIB$EXTZV (0,8,registers)
0413
0414      Call LINCHK (lun,2)
0415      Write (lun,30) csr0
0416      30      Format (/',',T8,'CSR0',T24,Z8.8)
0417
0418      Field = LIB$EXTZV (0,3,csr0)
0419
0420      Call LINCHK (lun,1)
0421      Write (lun,40) func(field)
0422      40      Format ('',T40,'FUNCTION = ',A<COMPRESSC (func(field))> )
0423
0424      Call OUTPUT (lun,csr0,csr0_1,5,5,7,'0')
0425
0426      C
0427      C      Decode and output the bits in the csr1 register
0428      C
0429
0430      Csr1 = LIB$EXTZV (8,8,registers)
0431
0432      Call LINCHK (lun,2)
0433      Write (lun,50) csr1
0434      50      Format (/',',T8,'CSR1',T24,Z8.8)
0435
0436
0437
0438      C
0439      C      Decode and output the bits in the csr2 register
0440      C
0441
0442      Csr2 = LIB$EXTZV (16,8,registers)
0443

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0444      Call LINCHK (lun,2)
0445      Write (lun,55) csr2
0446 55      Format (/ ' ',T8,'CSR2',T24,Z8.8)
0447
0448      Dataway_addr = LIB$EXTZV (0,6,csr2)
0449
0450      Call LINCHK (lun,1)
0451      Write (lun,60) dataway_addr
0452 60      Format (' ',T40,'DECDATAWAY ADDRESS = ',
0453      1 I<COMPRESS4 (dataway_addr)>,>,'.')
0454
0455      Call OUTPUT (lun,csr2,csr2_1,6,6,7,'0')
0456
0457  C
0458  C      Decode and output the mapping information for the header and/or
0459  C      data buffers
0460  C
0461
0462      If (no_irp .eq. 10) then
0463
0464      If (hdr_map_valid .eq. 1) then
0465
0466      Call LINCHK (lun,3)
0467      Write (lun,70)
0468 70      Format (/ ' ', 'HEADER BUFFER MAPPING INFORMATION',/)
0469
0470      call uba_mapping (lun,-1,uba_reg1(0))
0471
0472      call uba_mapping (lun,-1,uba_reg1(1))
0473
0474      call vecmapreg (lun,uba_reg1(2))
0475      endif
0476
0477      If (dat_map_valid .eq. 1) then
0478
0479      Call LINCHK (lun,2)
0480      Write (lun,80)
0481 80      Format (/ ' ', 'DATA BUFFER MAPPING INFORMATION')
0482
0483      call uba_mapping (lun,-1,uba_reg2(0))
0484
0485      call uba_mapping (lun,-1,uba_reg2(1))
0486
0487      call vecmapreg (lun,uba_reg2(2))
0488      Endif
0489      Endif
0490
0491  C
0492  C      Decode and output the 'dataway' protocol and error status
0493  C      information
0494  C
0495
0496      Call LINCHK (lun,2)
0497      Write (lun,90)
0498 90      Format (/ ' ', 'DECDATAWAY PROTOCOL AND STATUS INFORMATION')
0499
0500      Call LINCHK (lun,2)

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0501      Write (lun,100) err_sts
0502      Format (/,' ',T8,'ERROR STATUS',T24,Z8.8)
0503
0504      Field = LIB$EXTZV (0,5,err_sts)
0505
0506      Call OUTPUT_MLINES (lun,err_num(field),'!',32)
0507
0508      C
0509      C      Find out if the tumble table entry is valid and output it when
0510      C      necessary
0511      C
0512
0513      If (field .eq. 7
0514      1 or
0515      2 field .eq. 8) then
0516
0517      Call LINCHK (lun,1)
0518      Write (lun,110)
0519      Format (' ',T40,'***** TUMBLE TABLE *****')
0520
0521      Tumble_table = LIB$EXTZV (16,8,err_sts)
0522
0523      If (field .eq. 8) then
0524
0525      Tt_retry_cnt = LIB$EXTZV (0,2,tumble_table)
0526
0527      Call LINCHK (lun,2)
0528      Write (lun,120) tt_retry_cnt + 1
0529      Format (' ',T40,'REPEAT COUNT = ',
0530      1 I<COMPRESS$4 (tt_retry_cnt)>,'.')
0531      Write (lun,121)
0532      Format (' ')
0533
0534      Call OUTPUT (lun,tumble_table,tumble_tbl,5,5,7,'0')
0535
0536      Tt_protocol_err = LIB$EXTZV (5,1,tumble_table)
0537
0538      If (tt_protocol_err .eq. 1) then
0539
0540      Field = LIB$EXTZV (2,3,tumble_table)
0541
0542      Call OUTPUT_MLINES (lun,tt_protocol_id(field),'!',32)
0543      Endif
0544      Endif
0545
0546      If (field .eq. 7) then
0547
0548      Call LINCHK (lun,2)
0549      Write (lun,130) tumble_table
0550      Format (/,' ',T40,'DATA = ',Z4.4)
0551
0552      Endif
0553
0554      Call LINCHK (lun,1)
0555      Write (lun,140) ('*', I=1,34)
0556      Format (' ',T40,34A1)
0557      Endif

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```

0558
0559      Unit = LIB$EXTZV (5,6,err_sts)
0560
0561      Call LINCHK (lun,1)
0562      Write (lun,150) unit
0563 150      Format (' ',T40,'UNIT = ',I<COMPRESS4 (unit)>,'.')
0564
0565      C
0566      C      Decode the 'SOFTWARE INFORMATION' and return to ERRPRT
0567      C
0568      C      If there was no I/O pending, not all of the data included under
0569      C      software information will be valid, so only output the software
0570      C      information that is valid.
0571      C
0572
0573      call linchk (lun,1)
0574
0575      write(lun,155)
0576 155      format(' ',:)
0577
0578      if (no_irp .ne. 4) then
0579
0580      if (emb$w_hd_entry .ne. 98) then
0581
0582      call ucb$b_ertcnt (lun,emb$b_dv_ertcnt)
0583
0584      call ucb$b_ertmax (lun,emb$b_dv_ertmax)
0585      endif
0586      endif
0587
0588      call orb$l_owner (lun,emb$l_dv_ownuic)
0589
0590      call ucb$l_char (lun,emb$l_dv_char)
0591
0592      call ucb$w_sts (lun,emb$w_dv_sts)
0593
0594      call ucb$l_opcnt (lun,emb$l_dv_opcnt)
0595
0596      call ucb$w_errcnt (lun,emb$w_dv_errcnt)
0597
0598      Att_ucb0 = LIB$EXTZV (31,1,devdepend)
0599      Field = LIB$EXTZV (4,4,devdepend)
0600      Port_id = LIB$EXTZV (0,4,devdepend)
0601
0602      Call LINCHK (lun,2)
0603      Write (lun,160) devdepend
0604 160      Format ('/ ',T8,'UCB$L_DEVDEPEND',T24,Z8.8)
0605
0606      C
0607      C      The port id for the RT80x indicates whether the device is
0608      C      an RT801, RT803, RT805. Determine if the device is an RT80x
0609      C      and if so set up the port id to the proper value to output
0610      C
0611      Call LINCHK (lun,1)
0612      If (field .eq. rt80) then
0613
0614      If (port_id .eq. 2) then

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```

0615      Port_id = port_id + 1
0616
0617      Else if (port_id .eq. 3) then
0618      Port_id = port_id + 2
0619      Endif
0620
0621      Write (lun,165) device(field),port_id
0622 165      Format (' ',T40,A<COMPRESSC (device(field))>,I1)
0623
0624
0625      Else if (field .eq. dyt01) then
0626  C
0627  C      Device is a DYT01 , it has only one port so output the
0628  C      device type
0629  C
0630      Write (lun,167) device(field)
0631 167      Format (' ',T40,A<COMPRESSC (device(field))>)
0632
0633
0634      Else if (field .eq. dpm01
0635      1 or
0636      2 field .eq. dis) then
0637  C
0638  C      The device is either a DPM01 or Distributed Intelligent Subsystem,
0639  C      both currently support four ports (0-3). Output the device type
0640  C      and the port identification
0641  C
0642      Write (lun,170) device(field),port_id
0643 170      Format (' ',T40,A<COMPRESSC (device(field))>,
0644      1 ' - PORT #',I1)
0645      endif
0646
0647      If (att_ucb0 .eq. 1) then
0648
0649      Call LINCHK (lun,1)
0650      Write (lun,175)
0651 175      Format (' ',T40,'ATTENTION UCB0')
0652
0653      Endif
0654
0655      Call LINCHK (lun,2)
0656      Write (lun,180) devsts
0657 180      Format (' ',T8,'UCB$W_DEVSTS',T24,Z8.8)
0658
0659      Call OUTPUT (lun,devsts,dvsts,0,0,11,'0')
0660
0661      if (no_irp .ne. 4) then
0662
0663      if (emb$w_hd_entry .ne. 98) then
0664
0665      call linchk (lun,1)
0666
0667      write(lun,155)
0668
0669      call sb11_qio (lun,emb$w_dv_func)
0670
0671      call irp$w_bcmt (lun,emb$w_dv_bcmt)

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0672
0673      call irp$w_boff (lun,emb$w_dv_boff)
0674
0675      call irp$l_pid (lun,emb$l_dv_rqid)
0676
0677      call irp$q_iosb (lun,emb$l_dv_iosb1)
0678      endif
0679      endif
0680
0681      Return
0682      End

```

PROGRAM SECTIONS

Name	Bytes	Attributes
0 \$CODE	2095	PIC CON REL LCL SHR EXE RD NOWRT LONG
1 \$PDATA	616	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2 \$LOCAL	3804	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3 EMB	512	PIC OVR REL GBL SHR NOEXE RD WRT LONG
Total Space Allocated	7027	

ENTRY POINTS

Address	Type	Name
0-00000000		SB11

VARIABLES

Address	Type	Name	Address	Type	Name
2-00000AE9	L*1	ATT_UCBO	2-00000AEC	I*2	CSR0
2-00000AEE	I*2	CSRT	2-00000AF0	I*2	CSR2
2-00000B0C	I*4	DATAWAY_ADDR	2-00000AE8	L*1	DAT_MAP_VALID
3-0000005A	I*4	DEVDEPEND	3-0000005E	I*4	DEVSTS
3-0000001C	L*1	EMB\$B-DV-CLASS	3-00000010	L*1	EMB\$B-DV-ERTCNT
3-00000011	L*1	EMB\$B-DV-ERTMAX	3-0000003E	L*1	EMB\$B-DV-NAMLNG
3-0000003A	L*1	EMB\$B-DV-SLAVE	3-0000001D	L*1	EMB\$B-DV-TYPE
3-00000036	I*4	EMB\$L-DV-CHAR	3-00000012	I*4	EMB\$L-DV-IOB1
3-00000016	I*4	EMB\$L-DV-IOB2	3-00000026	I*4	EMB\$L-DV-MEDIA
3-0000004E	I*4	EMB\$L-DV-NUMREG	3-0000002E	I*4	EMB\$L-DV-OPCNT
3-00000032	I*4	EMB\$L-DV-OWNUIC	3-0000001E	I*4	EMB\$L-DV-RQPID
3-00000000	I*4	EMB\$L-HD-SID	3-0000003F	CHAR	EMB\$T-DV-NAME
3-00000024	I*2	EMB\$W-DV-BCNT	3-00000022	I*2	EMB\$W-DV-BOFF
3-0000002C	I*2	EMB\$W-DV-ERRCNT	3-0000003C	I*2	EMB\$W-DV-FUNC
3-0000001A	I*2	EMB\$W-DV-STS	3-0000002A	I*2	EMB\$W-DV-UNIT
3-00000004	I*2	EMB\$W-HD-ENTRY	3-0000000E	I*2	EMB\$W-HD-ERRSEQ
3-00000052	I*4	ERR_STS	2-00000AF8	I*4	FIELD
2-00000AE7	L*1	HDR_MAP_VALID	2-00000B10	I*4	I
AP-00000004a	L*1	LUN	2-00000AF4	I*4	NO_IRP

2-00000AEA L*1 PORT_ID
2-00000B04 I*4 TT_PROTOCOL_ERR
2-00000B08 I*4 TUMBLE_TABLE

3-00000056 I*4 REGISTERS
2-00000B00 I*4 TT_RETRY_CNT
2-00000AFC I*4 UNIT

ARRAYS

Address	Type	Name	Bytes	Dimensions
2-0000080D	CHAR	CSR0_1	66	(5:7)
2-0000084F	CHAR	CSR2_1	64	(6:7)
2-0000088F	CHAR	DEVICE	48	(8)
2-000008BF	CHAR	DVSTS	552	(0:11)
3-00000000	L*1	EMB	512	(0:511)
3-00000052	I*4	EMB\$\$_DV_REGS	420	(0:104)
3-00000006	I*4	EMB\$\$_HD_TIME	8	(2)
2-000002C5	CHAR	ERR_NUM	1120	(0:31)
2-00000725	CHAR	FUNC	232	(0:7)
2-00000000	CHAR	TT_PROTOCOL_ID	664	(0:7)
2-00000298	CHAR	TUMBLE_TBL	45	(5:7)
3-00000062	I*4	UBA_REG1	12	(0:2)
3-0000006E	I*4	UBA_REG2	12	(0:2)

LABELS

Address	Label	Address	Label	Address	Label	Address	Label	Address	Label	Address	Label
1-00000051	30'	1-00000063	40'	1-0000007C	50'	1-0000008E	55'	1-000000A0	60'	1-000000C6	70'
1-000000EF	80'	1-00000115	90'	1-00000146	100'	1-00000160	110'	1-0000018A	120'	1-000001AA	121'
1-000001AE	130'	1-000001C1	140'	1-000001CB	150'	1-000001E3	155'	1-000001E8	160'	1-00000205	165'
1-00000213	167'	1-0000021F	170'	1-00000238	175'	1-0000024E	180'				

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name	Type	Name	Type	Name	Type	Name	Type	Name
I*4	COMPRESS4	I*4	COMPRESSC		DHEAD1		FRCTOF		IRP\$\$_PID		IRP\$\$_IOSB
	IRP\$\$_BCNT		IRP\$\$_BOFF	I*4	LIB\$\$_EXTZV		LINCHK		ORB\$\$_OWNER		OUTPUT
	OUTPUT_MLINES		SB11_QIO		UBA_MAPPING		UCB\$\$_ERTCNT		UCB\$\$_ERTMAX		UCB\$\$_CHAR
	UCB\$\$_OPCNT		UCB\$\$_ERRCNT		UCB\$\$_STS		VECMAPREG				

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Subroutine SB11_QIO (lun,emb\$w_dv_func)

include 'src\$:qiocommon.for /nolist'

byte lun

integer*2 emb\$w_dv_func

integer*4 qiocode(0:1,0:63)

if (qiocode(0,0) .eq. 0) then

qiocode(1,24) = %loc(10\$_WRITECSR)

qiocode(1,25) = %loc(10\$_READCSR)

qiocode(1,26) = %loc(10\$_SETCHAR)

qiocode(1,32) = %loc(10\$_WRITELBLK)

qiocode(1,33) = %loc(10\$_READLBLK)

qiocode(1,34) = %loc(10\$_ABORT)

qiocode(1,35) = %loc(10\$_SETMODE)

qiocode(1,36) = %loc(10\$_WRITEWITHBUF)

qiocode(1,37) = %loc(10\$_READWITHBUF)

qiocode(1,39) = %loc(10\$_SENSEMODE)

qiocode(1,40) = %loc(10\$_WRITEBUFNCRC)

qiocode(1,41) = %loc(10\$_READWITHXBUF)

qiocode(1,48) = %loc(10\$_WRITEVBLK)

qiocode(1,49) = %loc(10\$_READVBLK)

do 10,i = 0,63

qiocode(0,i) = 33

if (qiocode(1,i) .eq. 0) then

qiocode(1,i) = %loc(qio_string)

endif

```

0321      10      continue
0322      endif
0323
0324      call irp$w_func (lun,emb$w_dv_func,
0325      1 qiocode(0,lib$extzv(0,6,emb$w_dv_func)))
0326
0327      return
0328
0329      end

```

PROGRAM SECTIONS

Name	Bytes	Attributes
0 \$CODE	197	PIC CON REL LCL SHR EXE RD NOWRT LONG
1 \$PDATA	8	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2 \$LOCAL	548	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3 QIOCOMMON	1247	PIC OVR REL GBL SHR NOEXE RD WRT LONG
Total Space Allocated	2000	

ENTRY POINTS

Address	Type	Name
0-00000000		SB11_Q10

VARIABLES

Address	Type	Name	Address	Type	Name
AP-00000008a	I*2	EMBSW DV FUNC	2-00000200	I*4	I
3-00000442	CHAR	IOS_ABORT	3-00000340	CHAR	IOS_ACCESS
3-000003C2	CHAR	IOS_ACPCONTROL	3-000004B3	CHAR	IOS_AVAILABLE
3-00000297	CHAR	IOS_CLEAN	3-00000369	CHAR	IOS_CREATE
3-00000385	CHAR	IOS_DEACCESS	3-00000393	CHAR	IOS_DELETE
3-0000026D	CHAR	IOS_DIAGNOSE	3-00000065	CHAR	IOS_DRVCLR
3-000004CB	CHAR	IOS_DSE	3-000000A9	CHAR	IOS_ERASETAPE
3-00000276	CHAR	IOS_FORMAT	3-00000071	CHAR	IOS_INITIALIZE
3-00000014	CHAR	IOS_LOADMCODE	3-000003A1	CHAR	IOS_MODIFY
3-000003E2	CHAR	IOS_MOUNT	3-00000000	CHAR	IOS_NOP
3-0000009D	CHAR	IOS_OFFSET	3-000000EB	CHAR	IOS_PACKACK
3-000000E0	CHAR	IOS_QSTOP	3-000003EF	CHAR	IOS_RDSTATS
3-00000421	CHAR	IOS_READCSR	3-00000169	CHAR	IOS_READHEAD
3-000002B6	CHAR	IOS_READLBLK	3-0000013F	CHAR	IOS_READPBLK
3-00000200	CHAR	IOS_READPRESET	3-00000195	CHAR	IOS_READTRACKD
3-0000033A	CHAR	IOS_READVBLK	3-0000045A	CHAR	IOS_READWTHBUF
3-00000484	CHAR	IOS_READWTHXBUF	3-0000004D	CHAR	IOS_RECAL
3-0000007C	CHAR	IOS_RELEASE	3-000001AB	CHAR	IOS_REREADN
3-000001B8	CHAR	IOS_REREADP	3-000000CA	CHAR	IOS_RETCENTER
3-000002E6	CHAR	IOS_REWIND	3-000002C9	CHAR	IOS_REWINDOFF
3-000000FC	CHAR	IOS_SEARCH	3-00000024	CHAR	IOS_SEEK

3-00000231	CHAR	IOS_SENSECHAR	3-00000309	CHAR	IOS_SENSEMODE
3-0000021D	CHAR	IOS_SETCCHAR	3-000003B8	CHAR	IOS_SETCLOCK
3-00000088	CHAR	IOS_SETCLOCKP	3-000002DD	CHAR	IOS_SETMODE
3-000002ED	CHAR	IOS_SKIPFILE	3-000002FA	CHAR	IOS_SKIPRECORD
3-00000029	CHAR	IOS_SPACEFILE	3-0000010E	CHAR	IOS_SPACERECORD
3-000003D7	CHAR	IOS_STARTDATA	3-000000B4	CHAR	IOS_STARTDATAP
3-00000037	CHAR	IOS_STARTMPROC	3-0000020F	CHAR	IOS_STARTSPNDL
3-00000059	CHAR	IOS_STOP	3-0000000D	CHAR	IOS_UNLOAD
3-0000046B	CHAR	IOS_WRITEBUFNCRC	3-0000011E	CHAR	IOS_WRITECHECK
3-000001E4	CHAR	IOS_WRITECHECKH	3-000003FF	CHAR	IOS_WRITECSR
3-00000153	CHAR	IOS_WRITEHEAD	3-000002A2	CHAR	IOS_WRITEBLK
3-00000247	CHAR	IOS_WRITEMARK	3-00000314	CHAR	IOS_WRITEOF
3-0000012A	CHAR	IOS_WRITEPBLK	3-000001C9	CHAR	IOS_WRITERET
3-0000017E	CHAR	IOS_WRITETRACKD	3-00000326	CHAR	IOS_WRITEVBLK
3-00000448	CHAR	IOS_WRITEWTHBUF	3-00000257	CHAR	IOS_WRTTMKR
AP-00000004a	L*1	LUN	3-00Q004A1	CHAR	Q10_STRING

ARRAYS

Address	Type	Name	Bytes	Dimensions
2-00000000	I*4	Q10CODE	512	(0:1, 0:63)

LABELS

Address	Label
**	10

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name
	IRP\$W_FUNC	I*4	LIB\$EXTZV

COMMAND QUALIFIERS

FORTTRAN /LIS=LIS\$:SB11/OBJ=OBJ\$:SB11 MSRC\$:SB11
/CHECK=(NOBOUNDS,OVERFLOW,NOUNDERFLOW)
/DEBUG=(NOSYMBOLS,TRACEBACK)
/STANDARD=(NOSYNTAX,NOSOURCE FORM)
/SHOW=(NOPREPROCESSOR,NOINCLUDE,MAP)
/F77 /NOG_FLOATING /I4 /OPTIMIZE /WARNINGS /NOD_LINES /NOCROSS_REFERENCE /NOMACHINE_CODE /CONTINUATIONS=19

COMPILATION STATISTICS

Run Time:	8.68 seconds
Elapsed Time:	18.05 seconds
Page Faults:	232
Dynamic Memory:	221 pages

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0153 AH-BT13A-SE
VAX/VMS V4.0

DIGITAL EQUIPMENT CORPORATION
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